

# OKANAGAN WATER STEWARDSHIP COUNCIL

*A Technical Advisory Body to the Okanagan Basin Water Board*

## MINUTES OF A MEETING HELD THURSDAY, APRIL 14, 2011, AT BEST WESTERN INN, 2402 HWY. 97N, KELOWNA, B.C.

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### COUNCIL MEMBERS:

#### Present

Assoc. of Professional Engineers & Geoscientists of B.C.	Don Dobson, Guest Chair
Assoc. of Professional Engineers & Geoscientists of B.C.	Ehren Lee
BC Agriculture Council	Hans Buchler
BC Fruit Growers Association	Lorraine Bennest
BC Ground Water Association	Remi Allard
B.C. Ministry of Environment, Resource Stewardship & Parks	Ken Cunningham
City of Kelowna	Jason Ough (alternate)
Environment Canada – Pacific & Yukon Region	Ruta Fluxgold
Interior Health Authority	Rob Birtles
Oceola Fish and Game Club	Lorne Davies
Okanagan Mainline Real Estate Board	Howard Neufeld
Regional District of Central Okanagan	Margaret Bakelaar
Regional District North Okanagan	Renee Clark (alternate)
Regional District of Okanagan-Similkameen	Evelyn Riechert
Shuswap Okanagan Forestry Association	Kerry Rouck
South Okanagan Real Estate Board	Elden Ulrich
UBC Okanagan	John Janmaat (alternate)
Water Supply Association of BC	Bob Hrasko

#### Regrets

Agriculture & Agri-Food Canada, Research Branch	Doug Edwards
Agriculture & Agri-Food Canada, Research Branch	Denise Neilsen
BC Cattlemen's Association	Lee Hesketh
B.C. Ministry of Agriculture and Lands	Ted van der Gulik
B.C. Ministry of Environment, Fish and Wildlife Branch	Steve Matthews
Canadian Water Resources Association	Brian Guy
City of Vernon	Rob Dickinson
Kelowna Fish and Game Club	Doug Flintoft
Okanagan Collaborative Conservation Program	Carolina Restrepo-Tamayo
Okanagan College	Douglas MacLeod
Okanagan Nation Alliance	James Pepper (alternate)
Osoyoos Lake Water Quality Society	Mark McKenney
Urban Development Institute	Robert Evans

### STAFF:

OBWB, Executive Director	Anna Warwick Sears
OBWB, Water Stewardship Director	Nelson Jatel
OBWB, Communications and Research Coordinator	Corinne Jackson
OBWB, Interim Office and Grants Administrator	Melissa Tesche

### GUESTS:

B.C. Ministry of Environment, OWSC Source Protection Cttee.	Vic Jensen
B.C. Ministry of Forests, Lands & Natural Res. Ops	Solvej Patschke
Grasslands Nursery	Toni Boot
Kelowna Capital News	Judie Steeves
Larratt Aquatic Consulting	Heather Larratt
SNC Lavalin	Joe Kennedy
Southern Interior Regional Drinking Water Team	Valerie Cameron
UBCO Masters candidate	Lisa Dahroughe

## 1. CALL MEETING TO ORDER

Guest Chair Don Dobson called the meeting to order at 1:00 p.m. and welcomed members and guests.

## 2. APPROVAL OF AGENDA

Moved by Rob Birtles

Seconded by Kerry Rourk

*"That the agenda for the April 14, 2011 meeting of the Okanagan Water Stewardship Council be approved."*

**CARRIED**

## 3. ADOPTION OF MINUTES

3.1 Minutes of a regular meeting of the Okanagan Water Stewardship Council held March 10, 2011, at the Best Western Hotel, Kelowna.

Three amendments were noted.

Moved by Remi Allard

Seconded by Elden Ulrich

*"That the minutes from the March 10, 2011 meeting of the Okanagan Water Stewardship Council be approved as amended."*

**CARRIED**

## 4. BOARD REPORT

Dr. Anna Warwick Sears presented her board report, noting that the last board meeting was at Head of the Lake Hall in Vernon. The board was welcomed by the new chief, Byron Louis, and there was a presentation by Okanagan Nation Alliance's Gwen Bridge. There is a lot of opportunity for collaboration on water issues, including source protection, she noted.

Next month, the board will be conducting a strategic planning session, looking at where the board would like to place emphasis over the next three years. Council members with any thoughts on this were invited to contact Dr. Warwick Sears.

The milfoil control program is being updated to reduce impacts on fish and endangered mussels that have been identified in Okanagan lakes.

Planning for the Osoyoos Lake Water Science Forum, Sept 18 to 20, is well underway.

The board received a draft update to the Okanagan WaterWise Action Plan and will be discussing it at next month's strategic planning session.

Dr. Warwick Sears noted that she was invited to attend a North Okanagan Regional Growth Strategy meeting with other agencies to provide feedback. Based on concern that source protection was not being given the attention it deserves, the Water Board agreed to send a letter to RDNO about the need to highlight this issue in its strategy.

## 5. ROUNDTABLE – MEMBER UPDATES

Council members were asked to provide an update and provide comments considering source protection, the issue of focus at the meeting.

- Mr. Buchler: The BC Agriculture Council has produced a Riparian Management Plan Guide, a follow-up to the Environmental Farm Plan. The guide is strongly tied to source protection and it's hoped that the agricultural community will adopt and use it.
- Ms. Riechert: Regional District of Okanagan-Similkameen has received grant funding for wetlands enhancement work, as well as Phase 2 of an aquifer vulnerability study. The RDOS is working on plans to sewer both sides of the lake in our region.
- Mr. Rourk: The forest industry has started to rebound in the last few months. Reorganization at the B.C. Ministry of Forests has caused some disruption in conducting business. Mountain pine beetle salvage is almost complete in the north and we're beginning to see the onset of the beetle in the south around Naramata. Regarding Source Water Protection, the cumulative impacts are being noted with the increase in multiple uses on the landscape.
- Mr. Birtles: Source protection has been the focus of much of the work at Interior Health. A meeting is being held with water suppliers on April 28 in Osoyoos to discuss a joint assessment of Osoyoos Lake and other issues. Water protection plans are continuing in the valley.
- Ms. Clark: Regional District of North Okanagan began work on a drought response plan in September. It is nearing completion and will be going to the Regional District Board soon. Staff have been preparing for Drinking Water Week (May 1 to 7) and will be inviting the public to tour the new Duteau Creek treatment plant. An intake at the north end of Kalamalka Lake is awaiting approval and then staff will be planning its installation. RDNO is also assisting with the Shuswap watershed planning process.
- Mr. Hrasko: The Water Supply Association of BC held a workshop in March on emergency planning for water utilities, source protection and riparian corridors. Black Mountain Irrigation District had issues recently with a horse paddock that was in place for a couple of months and which resulted in manure entering the water system. Interior Health and the Regional District of Central Okanagan had issues trying to address clean up costs. BMID will be going to RDCO, asking that there be better monitoring of such situations. The BMID area's snowpack is 10% above average. We are watching for potential landslides. Creek stabilization may be needed.
- Ms. Bennest: BC Fruit Growers Association has amalgamated its packing houses and is reorganizing. This may be beneficial in the long run but the costs for this are coming out of crop proceeds. Association members are concerned about source protection since crops are irrigated with treated water. The better the source of the water the less expensive to treat and potentially, the better the volume. There's a need to inform the public about crop water demand and the importance of conserving. Our need for water comes before water supplies are available and then in July and August when the fish need the water too.
- Mr. Jensen: B.C. Ministry of Environment requires communities to develop a liquid waste management plan before receiving a certificate to build a water treatment plant and discharging waste water. We're working on liquid waste management plans throughout the valley but see the need for the ministry to assist in source water protection planning on a valley-wide level.
- Mr. Lee: As a representative for the Association of Professional Engineers & Geoscientists of B.C., geoscientists are beginning to see their role in source water protection.
- Mr. Neufeld: The Okanagan Mainland Real Estate Board is noticing that realtors are beginning to talk about floodplains. They are being asked if certain lands have ever flooded. We're noticing that people on wells are getting concerned, wondering if the water will be there tomorrow and how climate change is going to affect it. We are also asked about backcountry access use.
- Mr. Ulrich: Following up on discussions at the Water Stewardship Council, the South Okanagan Real Estate Board is writing a letter to the International Joint Commission regarding the renewal of operating orders on Osoyoos Lake, its impact on lake levels and potential to affect property owners. It will also be sending a delegation to the Osoyoos Lake Water Science Forum in September. At the same time, the BC Real Estate Board is sending a letter to B.C. Ministry of Agriculture, opposing a bylaw change to control where one can build on ALR lands stating it's an infringement on individual rights.
- Mr. Cunningham: B.C. Ministry of Environment staff are working to develop Best Management Practices in community watersheds, looking at source protection.
- Dr. Janmaat: Research was recently completed looking at water use in part of the Okanagan which found that people do follow their neighbours. This has interesting implications. For example, if a

bylaw requires a certain landscape standard, which may prompt others in the area to adopt the same, perhaps the bylaws need to be revisited.

- Mr. Davies: Oceola Fish and Game Club has noted sediment in a fish-bearing creek in its area and the need to educate the public on working in and about a stream.
- Mr. Allard: The BC Groundwater Association is looking at certification and qualification of our members (e.g. pump installers) to ensure people working on water wells have the qualifications. We are also looking to raise awareness around source protection with groundwater development. Groundwater protection plans are being produced now, thanks to local government grants. The plans indicate where wells are and what protection should be taken. However, it is losing some momentum now that the next step requires action and monitoring. There is some concern around geothermal drilling. It is even less regulated in B.C. and is a finite resource. The number of boreholes is increasing and cross penetrating aquifers. There is potential for cross-contamination of aquifers so this needs to be watched.
- Mr. Ough: City of Kelowna is working on its filtration deferral application and is working with Interior Health on this. There is a source protection component to the application.
- Ms. Tesche: Water Board staff are working on developing a Topsoil Bylaws Toolkit. The Water Conservation and Quality Improvement Grants have been announced, with a total of \$300,000 being awarded to 19 projects in the valley.
- Mr. Jatel: The Water Board is working with Stewardship Council members to develop an even more effective council. The hydrologic connectivity study is moving forward with Summit Environmental and should be completed in a couple of weeks. The Water Management Program is up for review in 2012. Staff are looking forward to the coming year, completing projects under the WMP and looking ahead.
- Ms. Jackson: World Water Week was celebrated March 20 to 26. A public forum was held after office hours at the Bohemian Cafe downtown and was well-attended. A radio series that week on AM1150 and included guest speakers on various water quantity and quality issues. Staff launched the Okanagan WaterWise Challenge for youth, inviting them to learn more about Okanagan water issues. A pool and pizza party will be awarded in the North, Central and South Okanagan. The contest runs until May 3 to coincide with Drinking Water Week (May 1 to 7). The focus of DWW is on source protection, encouraging residents to keep our water clean. OBWB staff are working with RDNO, City of Penticton, and BC Water and Waste Association to coordinate efforts. DWW events are planned for RDNO, Peachland, Kelowna, and Summerland.

Margaret Bakelaar entered the meeting at 2:05 p.m.

## 6. DELEGATION – SOURCE WATER PROTECTION

Southern Interior Regional Drinking Water Team, Chair: Valerie Cameron  
Larratt Aquatic Consulting: Heather Larratt

Mr. Dobson introduced the speakers.

Ms. Cameron explained that the province created drinking water teams in each of B.C.'s health authority areas, to be comprised of representatives from all ministries that can affect water (e.g. forestry, tourism, agriculture, transportation, rural development). They also include local government representation. In the case of the Southern Interior Drinking Water Team this includes the OBWB, Ms. Cameron noted.

The purpose was to get ministries thinking about source water protection in their management plans.

Mr. Rourk exited the meeting at 2:12 p.m.

Provincial ministries have recently gone through a reorganization and a number of agencies are now

under one umbrella, which sees drinking water as the number one issue. The province is now trying to determine how to proceed and how we can all work together.

Deliverables so far include the development of a local government protocol to allow their input. Also, a guide has been developed for the public, explaining what they need to consider before working in an area (e.g. are there water sources here, who do I talk to about this before proceeding).

Ms. Cameron noted that the Water Sustainability Act will replace the Water Act and is expected to reach cabinet in 2012. It will consider land use and its impact on water. The old water act had no real way to protect water quality, she said.

Ms. Larratt presented council with research she has conducted, looking at intake protection zones. As a result of her work, she recommended riparian protection zones of 85 metres, subject to a Qualified Environmental Professional assessment for expansion or contraction to not less than 30 metres.

B.C. is behind in this regard, stated Ms. Larratt, pointing to governments in China, Latin America and the U.S., which are buying back watershed lands to protect their drinking water sources. New York, for example, is doing it because filtration deferral would cost \$10-12 billion and their health authority feels buying back wetlands are a better way to go than filtration, she added. It is also less costly.

Land values increase with shoreline buffers and green space, added Ms. Larratt, recommending that we look at buying back watersheds, and providing grants to landowners to undertake source protection work.

Intake Protection Zones should be designated within the distance a contaminant could travel in two hours under 80% of the wind events expected in a year, including from activities such as new stormwater outfalls, multi-slip marinas, houseboat docking and floating commercial operations.

Ms. Larratt noted the need for a full-cost accounting of the cost to protect our watersheds.

Ms. Bennest noted the practice of over-fertilizing and its impact on water sources. There needs to be better education around the use of fertilizers, she added.

Ms. Clark added that at one time there used to be lake classifications that helped upgrade protection of lakes, but this seems to have been dropped. Such classifications should be revisited for drinking water reservoirs, she suggested, adding that perhaps such a request should be made to the provincial government.

The 85 metre buffer won't guarantee clean water but it will be a great improvement over the current one metre, noted Ms. Larratt.

## **7. PRESENTATION AND DISCUSSION – SOURCE WATER PROTECTION COMMITTEE**

Ms. Patsche began a presentation from the Source Water Protection (SWP) Committee noting the importance of ensuring clean water at the source as the first step in protection. The Cryptosporidium outbreak in Kelowna in 1996 is a good example of what can happen when we don't protect our water at the source, she added, noting nearly 15,000 people got sick. It's important to protect for the environment and people, she added.

There are a number of challenges to source protection, however, including changes in ministry responsibilities, natural threats such as climate change, mountain pine beetle, recreation, and storm drains carrying untreated polluted water into our creeks. The chemical spill into Mill Creek last August is an example of the potential pollution. Additional threats to source water include ranching, forestry, wildfires and the loss of groundcover.

Mr. Birtles went on to note that Source Water Assessments are being conducted in the valley, in part with funding from the OBWB. The assessments determine potential hazards, assess risks to health and develop recommendations.

Ms. Clark noted a number of success stories in the RDNO, where the regional district and water purveyors worked with stakeholders to develop strategies and implement plans to protect source water. For example, a cattle impact reduction plan was developed for Duteau Creek, working with ranchers. There is now off-stream watering for livestock. In another example, fencing has been done along Oyama Creek to keep cattle out.

Mr. Jatel said that the SWP Committee is looking at a number of actions to address the issue, including: a potential workshop in the fall; advocacy to the province; development of Best Management Practices for multi-use watersheds; communication and outreach; a change to the OBWB's Sewage Facility Grants to include support for stormwater/rainwater infrastructure; development of a list of potential research topics for UBC-O students to address source water protection; and field trips for council members to look at the cumulative impacts of source water disruption in upland watersheds.

Mr. Dobson began the conversation noting that we haven't put a value on water. If the council could promote this idea, there could be a huge benefit to the valley. The value of water at the intake, and once it is treated and delivered to a user.

Ms. Fluxgold noted that Environment Canada has developed a Water Valuation Guide which it can provide for background.

Mr. Hrasko added that the Okanagan doesn't have protected watersheds like Vancouver or Victoria and the OBWB should be lobbying for an 85 metre buffer like it did on the lease lot issue.

The cost of protecting water might be a good question to study, said Dr. Janmmat. When it comes down to it you'll pay anything for it, he added, noting the example of New York which found it better to purchase wetlands than to treat water once it was damaged.

Ms. Bakelaar noted that the foreshore inventory mapping being done on Okanagan Lake and the recommendations that will come from it may be an opportunity for local government to develop policy to protect these areas.

Where we are playing in our watersheds is where we are having problems, added Mr. Birtles, saying that harvesting is not as much of a concern locally. We need to educate the public on this, he added.

There was discussion around the creation of one integrated Source Water Protection Plan for the Okanagan, instead of individual plans for the region's 56 community watersheds and countless aquifers.

A watershed plan would benefit entire area, said Mr. Allard, noting there are Groundwater Protection Plans but they have lost momentum because they require the purveyor to act voluntarily. There needs to be more than regulatory provisions and there needs to be money, he added.

Mr. Birtles said that from a population risk assessment perspective, a valley-wide plan would be much better. The OBWB's Groundwater Bylaws Toolkit is a tool that all Okanagan communities can adopt to create a valley-wide response, he added, saying such planning is possible.

Collaboration is not always easy, but it can be done, added Ms. Patschke, pointing to RDNO as an example.

Dr. Warwick Sears suggested a manual for small water utilities to get started on a source protection plan in their area, but said the case hasn't been made for one large plan for the valley.

Speaking in favour of such plans, Ms. Clark noted that it was a result of an assessment that showed risks that RDNO was able to get funds to get work done (e.g. fencing).

Mr. Dobson concluded the discussion asking if there was interest in a workshop to address source protection. There was general agreement in favour of a workshop, but it was also noted that the workshop needs to be inclusive (e.g. an invitation should go out to the trail rider groups and others).

## 8. NEXT MEETING

The next meeting of the Okanagan Water Stewardship Council will be held May 12, 2011.

Mr. Jatel noted that the Agricultural Water Reserve Committee will meet before the regular council meeting. Special guest speaker is Alberta's Lorne Fitch of the organization Cows and Fish. He has done much work in the area of source protection using a collaborative approach.

## 9. ADJOURNMENT

The meeting was adjourned at 4:40 p.m.

Moved by Rob Birtles

*"That there being no further business, the meeting of the Okanagan Water Stewardship Council of April 14, 2011 be adjourned."*

**CARRIED**

CERTIFIED CORRECT:

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Chair

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Executive Director